

DEPARTMENT OF TRANSPORTATION**DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
690 Walnut Ave. St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-001093**Date Inspected:** 26-Dec-2007**Project Name:** SAS Superstructure**OSM Arrival Time:** 1300**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 2330**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Li Zhi Jing**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG and Tower Mockup**Summary of Items Observed:**

Caltrans Quality Assurance (QA) Inspector Joe Lanz arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island, in Shanghai, China to periodically monitor welding and Quality Control (QC) functions during second shift. While on site the QA Inspector observed and/or discovered the following.

Bay 7**OBG Beams**

The QA Inspector randomly observed ZPMC welding personnel Yang Xuhe, ID #057795 and Ren Jinzhu, ID #044837 tack welding floor beam FB007-04 stiffeners and flange. The welding was performed in the 2F (horizontal) shielded metal arc welding (SMAW) process with a 4.0mm diameter electrode, filler metal appeared to be E7018, brand name TL-508. The QA Inspector periodically observed the ZPMC QC Certified Welding Inspector Li Zhi Jiang monitoring the welding. The welding appeared to be performed in accordance with the approved Welding procedure specification WPS-B-P-2112-FCM. The minimum preheat temperature of 10 degrees Celsius was verified by the QA inspector utilizing Tempilstik temperature indicators.

The QA inspector asked the ZPMC QC CWI Li Zhi Jiang what welding parameters had been recorded and he replied that the welding parameters had not been checked and recorded because the welding personnel were only tack welding. The QA inspector attempted to explain that the tack welds were a permanent part of the stiffener fillet welds. The QA Lead Inspector Mr. Bruce Burger was notified and a METS Incident Report (TL-15) was issued.

The welding parameters and work observed by QA Inspector appear to meet the minimum requirements in accordance with the WPS and contract documents with the exception of the issue noted above.

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Summary of Conversations:

As referenced above.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

Inspected By:	Lanz,Joe	Quality Assurance Inspector
Reviewed By:	Cochran,Jim	QA Reviewer
